

the signal processing apparatus according to claim 71, which is electrically connected to the image pick-up unit and performs signal processing for said image pick-up signal as a measurement signal; and

^{B1}
^{can't} a position calculation unit which is electrically connected to the signal processing apparatus and calculates said position of said mark on the basis of a signal processing result obtained by said signal processing apparatus.

¹⁰⁵
~~107~~. (Amended) An exposure apparatus for transferring a predetermined pattern onto a substrate, comprising:

an outer shape specifying unit including the image processing apparatus according to claim 105, which specifies an outer shape of said substrate;

^{B0}
^{rule}
^{1.124} a rotational position control unit which is electrically connected to the outer shape specifying unit and controls a rotational position of said substrate on the basis of said outer shape of said substrate which is specified by said image processing apparatus;

a mark detection unit which detects a mark formed on said substrate whose rotational position is controlled by said rotational position control unit; and

a positioning unit which is electrically connected to the mark detection unit and positions said substrate on the basis of a mark detection result obtained by said mark position detection unit,

wherein said predetermined pattern is transferred onto said substrate while said substrate is positioned by said positioning unit.

IN THE DRAWINGS

Approval of the attached substitute drawings is respectfully requested.